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ATTY DOCKET NO. RDID01051U BIRYUKOV, Sergey et a..

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IM 1	5,478,730	12/95	Alakhov et al.	435	68.1		
2	5,593,856	01/97	Choi et al.	435	68.1		·
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LM3	WO 93/07287	04/93	PCT	C12P	21/00		
4	WO 94/18371	08/94	PCT	D0 6F	58/14		
5	WO 98/02532	01/98	PCT	C12N	9/96	ABSTRA	СТ
V 6	WO 99/50436	10/99	PCT	C12P	21/0 2		
	OTHER DOCU	MENTS (Inclu	ding Author, Title, Date, Pertir	nent Pages, Etc.	<u>)</u>		
IM	Dong-Myung Kim, et Membrane", Biotech	al., "A Semicon nol. Prog. 1996,	tinuous Prokaryotic Coupled Trar 12, 645-649, XP-002106860	nscription/Translat	tion System Us	sing a Dialys	is
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Roberts

Palmenberg et al.

Dziewulski et al.

05/87

06/90

08/92

11	5,324,428	06/9●	Flaherty	210	232	
12	5,324,637	06/94	Thompson et al.	435	68.1	
13	5,434,079	07/95	Mozayeni	435	311	
14	5,503,741	04/96	Clark	210	232	
15	5,674,729	10/97	Wimmer et al.	435	235.1	
16	5,807,717	09/98	Joyce	435	91.1	
17	6,107,055	06/94	Bauer et al.	435	68.1	
			DEION BATENT BOCUMENTS			•

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	18	EP0312617B1	04/89	Europe	C12P	21/02 A	es y ra(т
-	19	EP0398083A1	11/90	Europe	C12M	1/12	BS ¢ RA	СТ
	20	EP0401369B1	12/90	Europe	C12P	21/00		1
	21	EP0485608B1	05/92	Europe	C12P	21/00		
	22	EP0593757B1	04/94	Europe	C12P	21/00		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

4,668,624

4,937,190

5,135,853

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						ATTY DOCKET NO. RDID010511		SERIAL NO.	937,474
INFORMATION DISCLOSURE CITATION (Use several styles of beles to y)					BIRYUKOV, Sergey et al.				
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· -			OTHER DOCUM	IENTS (Includin	ng Author	, Title, Date, Pertinent	t Pages, Etc	;.)	
		14	Alberts B. et al.,"Intra Protein Function, pg.	icellular Membran 133	es Increas	es the Rates of Diffusion-	limited React	ions", New Yor	k/London 1983,
		24							
			Baranov, Vladimir I. e pgs 123-142	t al,"Gene Expres	sion in Cel	l-Free System on Prepara	ative Scale'', 1	Methods in Enz	ymology. Vol., 217
		25							
EXAMINE	₹					DATE CONSIDERED			7
						ance with MPEP 609; Drav	w line through	citation if not in c	onformance and not
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		O I P A	Docket Number (Optional) RDID010511	Application Number 09/937,474
11	NFORM	NATION DISCLOSURE CITATION	Applicant(s)	07/3/4/4
•		(Use several sheets if necessary) JAN 1 6 2002	BIRYUKOV, Sergey et al.	Group Art Unit
		B	September 25, 2001	To Be Assigned
*EXAMINER		OTHER DOCUMENTS THE	tle, Date, Pertinent Pages, Etc.)	
INITIAL		Baranov, I. Vladimir et al., "Gene expression in a	cell -free system on the preparatvie sca	le", Gene, 84 (1989) 463-466
	26	:		
•		Craig, David et al., "Plasmid cDNA-directed prot system", Nucleic Acids Research, Vol. 20, No. 19 4	em synthesis in s coupled eukaryotic i 987-4995	n vitro transcription-transiation
	27	1		
	- 	Davis, Julie et al., "Large Scale Dialysis Reactions	Using E. Coili S30 Extract Systems",	Promega Notes (pg. 14-21)
	28			
	-, -	.l		
		Kleinkauf, Horst et al., "First German-Russian Su Biochemistry and Molecular Biology September 20	mmerschool on In Vitro Systems'', Teo 3-30, 1994 (pg 63-70)	chnical University Berlin Institute of
	29			_41
		Guajardo, Richard et al., "NTP Concentration Ef Occurs through Passive Sliding and Reveal that D	fects on Initial Transcription by T7 R	NAP Indiacte that Translocation
	30	Occurs through Passive Sliding and Reveal that D Productuve Initiation", J. Mol. Biol. (1998) 281, 7	ivergent Promoters have Distinct NTF 77-792	Concentration Requirements for
	!			
		Vsevolod V. Gurevich, et al., "Preparative in Vitro Biochemistry 195, 207-213 (1991)	o mRNA Synthesis Using SP6 and T7	RNA Polymerases", Analytical
	31			
		Kern, Jeffrey A. et al., "Application of Solution Ec	juilibrium Analysis to in Vitro RNA T	ranscription", Biotechnol. Prog. 1997,
	32	13, 747-756		
		Kigawa, Takanaori et al., "A Continuous Cell-Fre Biochem. 110, 166-168 (1991)	e protein Synthesis System for Couple	d Transcription-Translation'', J.
	33			
		Laios, Eleftheria et al., "Novel Hybridization Assa	y Configurations Based on In Vitro Ex	pression of DNA Reporter
	34	Molecules", Clinical Biochemistry, Vol. 31, No. 3,	151-158, April 1988	
	ļ			
		Maier, Thomas et al., "Strep-Tag II Affinity Purif Biosynthesis", Analytical, Biochemistry 259, 68-73	ication: An Approach to Study Interm (1998)	ediates of Metalloenzyme
	135			
	-	Martemyanov, Kirill A. et al., "Direct expression	of PCR products in a cell-free transcri	ption/translation systen: synthesis of
	36	antibacterial peptide cecropin", FEBS Letters 41	4 (1997) 268-270	1
Ī		Merrick, Williams C., "Translation of Exogenous Monitoring Cloned Gene Expression pgs 606-615	mRNAs in reticulocyte Lysates", Met	hods in Enzymology, Vol. 101,
	37	i		
XAMINER			DATE CONSIDERED	
EXAMINER	R: Initial i	f citation considered, whether or not citation is in conform	ance with MPEP Section 609; Draw line th	rough citation if not in conformance and

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			Docket Number (Optional)	Application Number					
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INI		ATION DISCLOSURE CITATION *Use several sheets if necessary) JAN 16	Applicant(s) BIRYUKOV, Sergey et al.						
	•	3AM / 2002 &	Filing Date September 25, 2001	Group Art Unit To Be Assigned					
				10 de Assigned					
*EXAMINER INITIAL			e, Date, Pertinent Pages, Etc.)						
		Pelham, Hugh R.B. et al., "An Efficient mRNA-Dep. 67, 247-256 (1976)	endent Translation System from Reti	culocyte Lysates", Eur. J. Biochem.					
,	38								
_		Pokrovskava, Irina D. et al., "In Vitro Transcriptio	n. Propagative DNA Violds in Analy	tical Scale Reactions". Analytical					
·		Biochemistry 220, 420-423 (1994)	m. Treparative K.VA Treids in Analy	ical Scale Reactions , Amalytical					
	39								
		Roberts, Bryan E. et al., "Efficient Translation of System from Commercial Wheat Germ", Proc. Nat	Tobacco Mosaic Virus RNA and Rab	bit Globin 9S RNA in a Cell-Free					
	40	System from Commercial Wheat Germ", Proc. Nat	. Acad. Sci. USA Vol. 70, No. 8, pgs 2	330-2334, August 1973					
	-								
Ì	t .	Ryabova, L.A. et al., "Preparative synthesis of glob Volume 17, Number 11, 1989 pg 4412	in in a continuous cell-free translation	system from rabbit reticulocytes",					
	141								
	<u> </u>		Ryabova, Lyubov A. et al., "Continuous-Flow Cell-Free Translation, Transcription-Translation, and Replication-Translati						
	4	Systems", Volume 77 (8) pgs	Free Translation, Transcription-Tra	nsiation, and Replication-Translation					
	42								
		Spirin, Alexander S. et al., "Cell-Free Synthesis Bio	oreactor", 1992 American Chemical S	ociety, pgs 31-43					
	43								
	43								
	÷	Spirin, Alexander S. et al., "A Continuous Cell-Free Vol. 242, pgs 1162-1164	e Translation System Capable of Prod	ucing Polypeptides in High Yield",					
	44			Y II					
-	4 -			AL DAI GA A D Clabic Chaire					
	İ	Suzuki, Haruo., "Effect of Concentration of KCI, M Synthesized", J. Biochem., 82, 251-260 (1997)	Tagnesium Acetate and Spermine on	the Ratio of a to B Globin Chains					
	45								
	i	Volyanik, Elena V. et al., "Synthesis of Preparative	Amour of Biologically Active Interlet	kin-6 Using a Conuous-Flow					
	46	Cell-Free Translation System", Analytical Biochem	istry 214, 289-294 (1993)						
		Yamamoto, Yu-Ichi et al., "Hollow Fiber Reactor F (pgs 1047-1050)	or Continuous Flow Cell-Free Protein	Production", Vol. 29 No. 6 1996					
	47								
	1	Zubay, Geoffrey et al., "In Vitro Synthesis Of Prot	rain In Miarahial Systems" 1072 ng	267 297					
		Zubay, Geoffiey et al., Ill vitro Synthesis Of Fron	iem in Microbiai Systems (, 1973, pg.)	207-207					
	48								
	t	Roche Molecular Biochemicals, "Linked in vitro SI	P6/T7-Transcription/Translation Kit-	radioactive", 14 pgs					
	49								
	· 4 · ·								
EXAMINER			DATE CONSIDERED						
	_		· · · · · · · · · · · · · · · · · · ·						
*FYAMINED	Initial if	citation considered, whether or not citation is in conformal	nce with MPEP Section 609: Draw line the	ough citation if not in conformance and					

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			暑	Siling Date September 25, 2001	Group Art Unit To Be Assigned
*EXAMINER INITIAL		OTHER DOCUMENTS	(Indiang dulland	le, Date, Pertinent Pages, Etc.)	
J. Wilson		PATENT ABSTRACTS OF.	JAPAN, 05-076381, 30	0/03/1993, "Methods for Synthesizing	g Polypeptide", 2 pgs
	50				
•	•	JAPANESE ABSTRACT, Pa	atent No. 07-031494 (1	rpg)	•
	51				
	52	PATENT ABSTRACTS OF , and Device Therefor", (3pgs)	JAPAN, 07-075592 20)/03/1995 "Method for Synthesizing F	Protein by Extracted Solution of Cell
	53	PATENT ABSTRACTS OF Apparatus Therefor" (3pgs)	JAPAN, 10-080295, 31	1/03/1998, "Synthesis of Protein by C	Cell-Free Protein Synthetic System and
	-	(Image), Single Tube Protein	System 3, Copyright	1998 by Novagen, Inc., (12 pgs)	
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